

What is claimed is:

1. A method for cleaning a wafer, comprising:
cleaning a polymer residue from an etched wafer using a wet clean solvent; and
performing an anneal on the etched wafer to remove a component of the solvent
prior to a metal deposition.
2. The method of claim 1, the etched wafer comprising at least one of:
an organosilicate glass (OSG), a methylsilsesquioxane (MSQ) dielectric material,
a fluorine-doped silicate glass (FSG), and a silicon-dioxide (SiO_2).
3. The method of claim 1, the wet clean solvent comprising an acid.
4. The method of claim 3, the component comprising dimethyl acetamide (DMAC).
5. The method of claim 1, further comprising:
performing a dry clean of the etched wafer to remove a photoresist, prior to
cleaning the polymer residue.
6. The method of claim 5, the dry clean comprising a plasma including at least one
of: hydrogen, oxygen and an inert gas.
7. The method of claim 1, the anneal comprising a low-pressure anneal.

8. The method of claim 1, the low-pressure anneal performed in substantially a vacuum.
9. The method of claim 1, the anneal comprising a high-temperature anneal.
10. The method of claim 9, the high-temperature anneal performed at a higher temperature than a boiling point of the component.
11. The method of claim 9, the high temperature anneal performed at a temperature at most equal to 300 degrees Celsius.
12. The method of claim 9, the high temperature anneal at least partially performed at 250 degrees Celsius.
13. The method of claim 1, the anneal performed for a duration that does not alter a critical dimension of the etched wafer and does not cause a metal extrusion.
14. The method of claim 13, the duration comprising at most three minutes.
15. The method of claim 1, wherein the anneal excludes an application to the etched wafer of a plasma generated from at least one of: a radio-frequency energy and a microwave energy.

16. The method of claim 1, the cleaning performed after at least one of: a via-etch process, a trench-etch process, and an etch-stop etch process
17. The method of claim 1, the metal deposition including a copper deposition.
18. The method of claim 1, the metal deposition comprising at least one of: a barrier deposition and a metal seed layer deposition.
19. A method for preparing a wafer for a metal deposition, comprising:
performing a wet clean process on a post-etch wafer using a solvent comprising DMAC; and
performing an anneal on the post-etch wafer to remove an absorbed component of the solvent after the wet clean process and prior to a metal deposition, the anneal performed at a temperature higher than a boiling point of the component.
20. A method for removing volatile cleanser compounds from a post-etch substrate, comprising:
performing a plasma strip of an exposed low k dielectric material to remove a photoresist residue after an etch of the material;
performing a wet clean process using a fluorine-based solvent to remove a polymer residue of the plasma strip from the material; and

performing a low-pressure, high-temperature, limited-duration anneal after the wet clean process and prior to a metal barrier deposition to remove a component of the fluorine-based solvent from the material, whereby the anneal is exclusive of an application of a plasma generated from one or more of: a radio-frequency (RF) radiation and a microwave radiation.